

Title (en)
CHAIN GUIDE AND CHAIN TRANSMISSION DEVICE

Title (de)
KETTENFÜHRUNG UND KETTENANTRIEBSVORRICHTUNG

Title (fr)
GUIDE-CHAÎNE ET DISPOSITIF DE TRANSMISSION PAR CHAÎNE

Publication
EP 2803880 A4 20150408 (EN)

Application
EP 12865500 A 20121227

Priority
• JP 2012001994 A 20120110
• JP 2012002004 A 20120110
• JP 2012083834 W 20121227

Abstract (en)
[origin: EP2803880A1] A chain guide is provided which reduces moving resistance of a camshaft-driving, torque-transmitting timing chain. The chain guide includes a guide base (21) provided on one side of the timing chain (5) to face the timing chain and having an opposed pair of side plates (22). The side plates support the respective ends of roller shafts (31) each rotatably supporting a chain-guiding needle roller bearing (41). Each needle roller bearing includes a retainer (43) guided by the needle roller elements (45). With this arrangement, the outer races (42) of the bearings, which guide the movement of the timing chain (5) while kept in rolling contact with the timing chain, encounter less rotational resistance. This in turn reduces moving resistance of the timing chain (5) and thus fuel consumption.

IPC 8 full level
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Citation (search report)
• [Y] JP 2011089553 A 20110506 - NTN TOYO BEARING CO LTD
• [Y] EP 1760340 A2 20070307 - NTN TOYO BEARING CO LTD [JP]
• [Y] DE 19517217 A1 19960509 - SCHAEFFLER WÄELZLAGER KG [DE]
• [A] EP 2395261 A1 20111214 - NTN TOYO BEARING CO LTD [JP]
• [A] JP 2000074071 A 20000307 - NIPPON SEIKO KK
• See references of WO 2013105448A1

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